REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 29-33, 37-45, and 47-60 are pending in the present application. Claims 31, 33, 41, 43, 44, 55, 59, and 60 are amended and Claim 46 is canceled without prejudice by the present amendment.

In the outstanding Office Action, Claims 31, 41, 44-52, 55, 59, and 60 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-30 of Kamiguchi et al. (U.S. Patent No. 6,303,218 B1, herein "Kamiguchi"); Claims 53 and 54 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-30 of Kamiguchi in view of Kishi et al. (U.S. Patent No. 5,729,411, herein "Kishi"); Claims 56 and 58 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-30 of Kamiguchi in view of Gill et al. (U.S. Patent No. 5,701,222, herein "Gill"); Claim 57 was rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-30 of Kamiguchi in view of Gill and Hashimoto (U.S. Patent No. 5,847,907); Claims 31, 41, 44-55, 59, and 60 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-35 of Fukuzawa et al. (U.S. Patent No. 6,338,899 B1, herein "Fukuzawa '899"); Claims 56 and 58 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-35 of Fukuzawa '899 in view of Gill; Claim 57 was rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-35 of Fukuzawa '899 in view of Gill and Hashimoto; Claims 31, 41, 44-52, 55, 59, and 60 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-3 of Fukuzawa et al. (U.S. Patent No. 6,853,520 B1,

herein "Fukuzawa '520"); Claims 53 and 54 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-3 of Fukuzawa '520 and Kishi: Claims 56 and 58 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-3 of Fukuzawa '520 in view of Gill; Claim 57 was rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over Claims 1-3 of Fukuzawa '520 in view of Gill and Hashimoto; Claims 33, 43, and 46 were rejected under 35 U.S.C. § 112, first paragraph; Claims 44, 46, and 55 were rejected under 35 U.S.C. § 112, second paragraph; Claims 31, 41, 44-55, 59, and 60 were rejected under 35 U.S.C. § 102(e) as anticipated by Kamiguchi; Claims 31, 33, 41, 43-50, 52, 55, 56, and 58-60 were rejected under 35 U.S.C. § 103(a) as unpatentable over Gurney et al. (U.S. Patent No. 5,422,571, herein "Gurney") in view of Gill; Claims 53 and 54 were rejected under 35 U.S.C. § 103(a) as unpatentable over Gurney in view of Gill and Kishi; Claim 57 was rejected under 35 U.S.C. § 103(a) as unpatentable over Gurney in view of Gill and Hashimoto; and Claims 32 and 42 were rejected under 35 U.S.C. § 103(a) as unpatentable over Gurney in view of Gill and Otsuka et al. (U.S. Patent No. 4,789,910, herein "Otsuka").

Applicants thank the Examiner for the courtesy of an interview extended to Applicants' representative on June 28, 2005. During the interview, the differences between the claims and the applied art were discussed. Further, clarifying claim amendments, similar to those presented herewith, were also discussed. The Examiner indicated that the discussed claim amendments appear to distinguish over the applied art. Arguments presented during the interview are reiterated below.

Regarding to the outstanding grounds for rejection based on the obviousness-type double patenting, independent Claims 31, 41, 44, 59, and 60 have been amended to recite a

bias point and a range for the bias point as disclosed in the specification at page 29, lines 1-25, and in Figure 15. No new matter has been added.

As discussed during the interview, the bias point of the claimed magnetoresistance effect element is shown in Figure 15 and it is different from the bias point of the magnetoresistance element of the background art, also shown in Figure 15 as first to fourth comparative cases. In addition, none of the applied art teaches or suggests a bias point having the claimed range. Thus, it is respectfully submitted that independent Claims 31, 41, 44, 59, and 60 and each of the claims depending therefrom patentably distinguish over the applied art.

Regarding the rejection of Claims 33, 43, and 46 under 35 U.S.C. § 112, first paragraph, Claims 33 and 43 have been amended to recite the expression "equal to or smaller" as discussed with the Examiner during the interview. No new matter has been added. Regarding Claim 46, that claim has been canceled. Accordingly, it is respectfully submitted this rejection be withdrawn.

Regarding the rejection of Claims 44, 46, and 55 under 35 U.S.C. § 112, second paragraph, Claim 44 has been amended as suggested by the outstanding Office Action, Claim 46 has been canceled, and Claim 55 has been amended as also suggested by the outstanding Office Action. No new matter has been added. Accordingly, it is respectfully requested this rejection be withdrawn.

Regarding the rejection of Claims 31, 41, 44-55, 59, and 60 under 35 U.S.C. § 102(e) as anticipated by <u>Kamiguchi</u>, independent Claims 31, 41, 44, 59, and 60 have been amended as noted above. As discussed during the interview, the bias point and its range are not disclosed by <u>Kamiguchi</u>, and therefore, the outstanding rejection under 35 U.S.C. § 102(e) is believed to have been overcome.

In response to the similar grounds for rejection under 35 U.S.C. § 103(a) relying on a combination of Gurney, Gill, Kishi, Hashimoto, and Otsuka, as discussed during the interview, none of these references teaches or suggests the bias point and its range required by amended Claims 31, 41, 44, 59, and 60. Accordingly, it is respectfully submitted that independent Claims 31, 41, 44, 59, and 60 and each of the claims depending therefrom patentably distinguish over Gill, Gurney, Kishi, Hashimoto, and Otsuka, either alone or in combination.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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